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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,260	02/20/2004	Nathan S. Abramson	MVT-001CP	2259
959 7590 08/31/2007 LAHIVE & COCKFIELD, LLP ONE POST OFFICE SQUARE BOSTON, MA 02109-2127			EXAMINER MAI, KEVIN S	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/708,260

Applicant(s)

ABRAMSON ET AL.

Examiner

Kevin S. Mai

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :1 - 3/5/2004, 2 - 4/18/2005, 3 - 8/8/2005.

DETAILED ACTION

1. Claims 1 – 18 have been examined and are pending.

Specification

2. The disclosure is objected to because of the following informalities:
 - Paragraph [0028] Lines 6 and 9 – The usage of the number 18 instead of 14 when describing server nodes.
 - Paragraph [0030] Lines 1 and 7 – The usage of the number 18 instead of 14 when describing server nodes.
 - Paragraph [0118] Line 9 – ‘foe’ seems to be a misspelling of for.Appropriate correction is required.
3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. These are located at:
 - Paragraph [0059] Line 2 – hyperlink
 - Paragraph [0060] Line 2 – hyperlink
 - Paragraph [0061] Line 2 – hyperlink
 - Paragraph [0065] Lines 1 and 2 – hyperlink
 - Paragraph [0066] Lines 3, 11, and 12 – hyperlink
 - Paragraph [0070] Lines 1 and 2 – hyperlink
 - Paragraph [0072] Lines 6, 7, and 10 – hyperlink
 - Paragraphs [0074] through [0081] – XML code

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- Paragraph [0083] Lines 8 and 9 – hyperlink
- Paragraphs [0085] through [0090] – XML code
- Paragraph [0091] Lines 2 and 3 – hyperlink
- Paragraphs [0092] through [0101] – XML code
- Paragraph [0103] Lines 8 and 9 – hyperlink
- Paragraphs [0105] through [0110] – XML code
- Paragraph [0111] Lines 3 and 4 – hyperlink

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 1 recites the limitation "displaying the portion of the second content file."

There is insufficient antecedent basis for this limitation in the claim because it is never mentioned previous to that point. There is no second content file to display given the previous steps. It is assumed that applicant meant to say 'displaying the portion of the content file' or 'displaying the first portion of the content file' for the remainder of this action.

6. Claim 18 recites the limitation "including a first content file and a second content file." However later in the claim it makes no distinction between the first and second content files and simply refers to 'a content file' or 'the content file.' The usage of either the first or second files is never clearly stated.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1 – 13, and 16 – 18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 13, and 1 – 17 of copending Application No. 10/708,267. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application anticipates the examined application. See claim comparison table below.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Comparison Table

Claim	10/708,260	Claim	10/708,267
1	A client system for efficiently downloading a page of broadband	1	A client system for efficiently downloading video content

	<p>content including at least one content file, the client system comprising:</p> <p>a mass storage device;</p> <p>a bandwidth measurement device determining the bandwidth of a network connection over which a content file is downloaded;</p> <p>a download manager retrieving and storing in the mass storage device a portion of the content file, the size of the portion of the content file responsive to the determination made by the bandwidth measurement device; and</p> <p>a presentation manager retrieving the portion of the content file from mass storage and displaying the portion with a standard media player application,</p> <p>wherein the download manager downloads the remainder of the content file in response to the presentation manager displaying the portion of the second content file.</p>		<p>represented by at least one content file and integrating interactivity with the video content, the client system comprising:</p> <p>a mass storage device;</p> <p>a bandwidth measurement device determining the bandwidth of a network connection over which a content file is downloaded;</p> <p>a download manager retrieving and storing in the mass storage device a portion of a first file comprising video content and a second file comprising an interactive element, the size of the portion of the first file responsive to the bandwidth determination made by the bandwidth measurement device; and</p> <p>a presentation manager (i) retrieving the portion of the first file from mass storage, (ii) displaying with a standard media player application video content represented by the portion of the first file, (iii) retrieving the second file from mass storage, and (iv) displaying with a standard media player application the interactive element semi-transparently over the video content,</p> <p>wherein the download manager retrieves the remainder of the first file in response to the presentation manager displaying the retrieved portion of the first file.</p>
2	The client system of claim 1 wherein the mass storage device comprises a redundant array of	2	The client system of claim 1 wherein the mass storage device comprises a redundant array of

	independent disks.		independent disks.
3	The client system of claim 1 wherein the mass storage device comprises a network storage solution.	3	The client system of claim 1 wherein the mass storage device comprises a network storage solution.
4	The client system of claim 1 wherein the bandwidth measurement device comprises a timer.	4	The client system of claim 1 wherein the bandwidth measurement device comprises a timer.
5	The client system of claim 1 wherein the bandwidth measurement device and the download manager comprise a single process.	5	The client system of claim 1 wherein the download manager and the bandwidth measurement device comprise a single process.
6	The client system of claim 1 wherein the download manager comprises a thread process.	6	The client system of claim 1 wherein the download manager comprises a thread process.
7	The client system of claim 1 wherein the download manager comprises one of the group consisting of an ActiveX control and a JAVA applet.	7	The client system of claim 1 wherein the download manager comprises one of the group consisting of an ActiveX control and a JAVA applet.
8	The client system of claim 1 wherein the presentation manager comprises a threaded process.	8	The client system of claim 1 wherein the presentation manager comprises a threaded process.
9	The client system of claim 1 wherein the presentation manager comprises a Windows Media Player application.	9	The client system of claim 1 wherein the presentation manager comprises a Windows Media Player application.
10	A method for efficiently downloading a page of broadband content including at least one content file, the method comprising the steps of: (a)retrieving a content file;	10	A method for efficiently downloading video content including at least one content file and integrating interactivity with the video content, the method comprising the steps of: (a)retrieving a first content file;

	<p>(b)terminating retrieval of the content file before the entire content file is retrieved;</p> <p>(c)storing the retrieved portion of the content file in a mass storage device;</p> <p>(d)reading the portion of the content file from the mass storage device;</p> <p>(e)displaying with a standard media player application the read portion of the content file; and</p> <p>(f)retrieving, in response to step (e), the remainder of the content file.</p>		<p>(b)terminating retrieval of the first content file before the entire content file is retrieved;</p> <p>(c)storing the retrieved portion of the first content file in a mass storage device;</p> <p>(d)displaying with a standard media player application content represented by the portion of the first content file;</p> <p>(e)retrieving a second file from mass storage representing an interactive element;</p> <p>(f)displaying with a standard media player application semi-transparently over the displayed video content an interactive element represented by the second file; and</p> <p>(g)retrieving, in response to step (d), the remainder of the first content file.</p>
11	<p>The method of claim 10 wherein step (b) comprises:</p> <p>(b-a)determining the bandwidth of a network connection over which the content file is retrieved; and</p> <p>(b-b)terminating retrieval of the content file before the entire content file is retrieved, the termination responsive to the bandwidth determination made in step (b-a).</p>	11	<p>The method of claim 10 wherein step (b) comprises:</p> <p>(b-a)determining the bandwidth of a network connection over which the content file is retrieved; and</p> <p>(b-b)terminating retrieval of the content file before the entire content file is retrieved, the termination responsive to the bandwidth determination made in step (b-a).</p>

12	The method of claim 10 wherein step (a) comprises retrieving from a peer-to-peer network a content file.	12	The method of claim 10 wherein step (a) comprises retrieving from a peer-to-peer network a content file representing video content.
13	The method of claim 10 wherein step (a) comprises retrieving from a multicast network a content file.	13	The method of claim 10 wherein step (a) comprises retrieving from a multicast network a content file representing video content.
17	The method of claim 10 wherein step (e) and step (f) occur substantially concurrently.	15	The method of claim 10 wherein step (d) and step (g) occur substantially concurrently.
16	The method of claim 10 further comprising the step of displaying with a standard media player application the remainder of the content file.	16	The method of claim 10 further comprising the step of displaying with a standard media player application content represented by the remainder of the first content file.
18	<p>An article of manufacture having embodied thereon computer-readable program means for efficiently downloading a page of broadband content including a first content file and a second content file, the article of manufacture comprising:</p> <p>computer-readable program means for retrieving a content file;</p> <p>computer-readable program means for terminating retrieval of the content file before the entire content file is retrieved;</p> <p>computer-readable program means for storing the retrieved portion of the content file in a mass storage device;</p> <p>computer-readable program means for reading the portion of the content</p>	17	<p>An article of manufacture having embodied thereon computer-readable program means for efficiently downloading video content and integrating interactivity with the video content, the article of manufacture comprising:</p> <p>computer-readable program means for retrieving a first content file;</p> <p>computer-readable program means for terminating retrieval of the first content file before the entire content file is retrieved;</p> <p>computer-readable program means for storing the retrieved portion of the first content file in a mass storage device;</p>

<p>file from the mass storage device;</p> <p>computer-readable program means for displaying with a standard media player application the read portion of the content file; and</p> <p>computer-readable program means for retrieving the remainder of the content file.</p>	<p>computer-readable program means for displaying with a standard media player application content represented by the portion of the first content file;</p> <p>computer-readable program means for retrieving a second file from mass storage representing an interactive element;</p> <p>computer-readable program means for displaying with a standard media player application semi-transparently over the displayed video content an interactive element represented by the second file; and</p> <p>computer-readable program means for retrieving the remainder of the first content file.</p>
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Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 10 – 12, 14, and 16 - 18 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pub. No. 2004/0128343 A1 to Mayer (hereinafter “Mayer”).

As to claims 10 and 18, Mayer teaches a method (and an article of manufacture having embodied thereon computer-readable program means) for efficiently downloading a page of broadband content including at least one content file, the method comprising the steps of (Abstract lines 1 –2 discloses a method and system wherein some segments of at least one program are downloaded):

(a)retrieving a content file (Paragraph [0034] lines 1 – 3 teaches that segments A are distributed from the memory everywhere, including the caches of end-users.

Where distribution from memory reads on retrieving);

(b)terminating retrieval of the content file before the entire content file is retrieved

(Paragraph [0034] lines 1 – 3 teaches that initially program segments A are distributed and thus the entire content file is not retrieved);

(c)storing the retrieved portion of the content file in a mass storage device

(Paragraph [0034] lines 1 – 3 teaches that segments A are distributed from the memory everywhere, including the caches of end-users (i.e. mass storage device));

(d)reading the portion of the content file from the mass storage device

(Paragraph [0041] lines 7 – 14 teaches that the buffer manager instructs user cache to pre-populate buffer with the starting portion of program segment P1A);

(e)displaying with a standard media player application the read portion of the content file (Paragraph [0041] lines 24 – 27 teaches that when the rendering clock begins, packets are moved through a decryption/decompression component and then the rendered component. This is read to be a media playing application); and

(f)retrieving, in response to step (e), the remainder of the content file (Paragraph [0041] lines 7 – 14 teaches after pre-populating with segment P1A the P1B packets are expected to stream-in shortly and then media server start streaming packets carrying segment P1B to interface of PC).

As to claim 11, Mayer teaches the method of claim 10 wherein step (b) comprises:

(b-a)determining the bandwidth of a network connection over which the content file is retrieved (Paragraph [0049] lines 14 – 17 teaches that a determination can be made of the expected available bandwidth); and

(b-b)terminating retrieval of the content file before the entire content file is retrieved, the termination responsive to the bandwidth determination made in step (b-a) (Paragraph [0049] lines 14 – 17 teaches that the program P may be split with the ratio that best compensates for the bandwidth available and then in paragraph

[0034] it teaches that program segments A are distributed. Thus only a portion is sent based on the bandwidth determination).

As to claim 12, Mayer teaches the method of claim 10 wherein step (a) comprises retrieving from a peer-to-peer network a content file (Paragraph [0047] lines 1 – 3 teaches that in another preferred embodiment, program segments A are shared by end-users, interconnected by broadband, for example, through peer-to-peer technology).

As to claim 14, Mayer teaches the method of claim 10 wherein step (f) comprises retrieving, in response to step (e), the remainder of the content file from a peer-to-peer network (Paragraph [0047] lines 1 – 3 teaches that in another preferred embodiment, program segments A are shared by end-users, interconnected by broadband, for example, through peer-to-peer technology).

As to claim 16, Mayer teaches the method of claim 10 further comprising the step of displaying with a standard media player application the remainder of the content file (Abstract lines 4 – 10 of teaches that when the customer activates a request, the remaining (complementary) segments of the requested program are streamed over the network from a designated server to the customer's device, where they are combined with the first, pre-stored segments, and rendered by the device to provide the consumer with an immediate, high-quality program experience. Mayer teaches the claim when he states 'the remaining

(complementary) segments of the requested program are streamed' and then 'rendered by the device').

As to claim 17, Mayer teaches the method of claim 10 wherein step (e) and step (f) occur substantially concurrently (Paragraph [0041] Lines 7 through 14 teaches that the buffer manager instructs user cache to pre-populate buffer with the starting portion of program segment P1A. The buffer manager uses frame sequence numbers or rendering-clock values to keep empty buffer slots for P1B packets that are expected to stream-in shortly. Media server starts streaming packets carrying segment P1B to interface of PC. Then in paragraph [0041] lines 24 through 27 it teaches that when the rendering clock begins, packets are moved through a decryption/decompression component and then the rendered component (e.g., video board/PC screen and/or soundcard/speakers) Steps (e) and (f) occurring concurrently are clearly taught in Mayer when it states 'pre-populate buffer with the starting portion of program segment' with 'P1B packets that are expected to stream-in shortly.' Since P1B is expected to stream in shortly as part A is pre-populating the buffer the two processes are occurring substantially concurrently).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 1 – 3 and 5 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2001/0029523 A1 to Mcternan et al. (hereinafter “Mcternan”) and further in view of U.S. Pub. No. 2004/0128343 A1 to Mayer (hereinafter “Mayer”).

As to claim 1, Mcternan teaches a client system for efficiently downloading a page of broadband content including at least one content file, the

client system comprising (Abstract lines 1 – 2 discloses the efficient distribution of rich media to clients):

a mass storage device (Paragraph [0069] lines 5 – 7 discloses a persistent and transient memory for storing received data packets, storing and executing application programs, and storing other resources);

a bandwidth measurement device determining the bandwidth of a network connection over which a content file is downloaded (Paragraph [0045] lines 6 – 10 discloses that the server receives data indicating the available bandwidth for transmission of the presentation to the client, such as from a benchmarking program running on the client. The benchmarking program can measure various parameters, including bandwidth between the server and client);

a download manager (Paragraph [0070] lines 1 – 2 discloses The Media Player contains several components or systems including a Download Manager)

However Mcternan does not teach but Mayer teaches retrieving and storing in the mass storage device a portion of the content file, the size of the portion of the content file responsive to the determination made by the bandwidth measurement device; (Paragraph [0031] lines 4 – 6 of Mayer discloses splitting each program into at least two complementary program segments A and B and in paragraph [0049] lines 14 – 17 it is taught that when preparing to download segment A, a determination can be made of the expected available bandwidth and the program

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will be split to compensate. Then in paragraph [0034] lines 1 through 3 program segments A are initially distributed from the memory everywhere, including the caches of end-users.

Thus programs are split into 2 portions based on the expected available bandwidth after which only segment A of the program is downloaded. This reads on the claim in that it downloads a portion of the program responsive to the determination of the previous step. The two references are analogous art because they are from the same field of distributing media over a network.

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to use Mcternan's download manager with Mayer's idea of splitting a program. The motivation behind the combination would have been to 'provide a system that significantly increases a consumer's on-demand, high-quality program choices at any particular time' Mayer paragraph [0010] lines 1 – 3. Therefore, it would have been obvious to combine Mcternan with Mayer to obtain the limitation above); and

Mcternan teaches a presentation manager retrieving the portion of the content file from mass storage and displaying the portion with a standard media player application (In paragraph [0101] Lines 9 –11 data contained in the Agent's buffer is decoded and passed to appropriate Renderer's to produce output to the viewer. In here taking the data from the buffer reads on the retrieving the content file and passing it to an appropriate renderer is the same as displaying on a media player application),

wherein the download manager (Paragraph [0070] lines 1 – 2 discloses The Media Player contains several components or systems including a Download Manager) However Mcternan does not teach but Mayer teaches downloads the remainder of the content file in response to the presentation manager displaying the portion of the second content file (Abstract lines 4 –10 of Mayer teaches that when the customer activates a request, the remaining (complementary) segments of the requested program are streamed over the network from a designated server to the customer's device, where they are combined with the first, pre-stored segments, and rendered by the device to provide the consumer with an immediate, high-quality program experience.

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to use Mcternan's download manager with Mayer's idea of splitting a program. The motivation behind the combination would have been to provide a system that significantly increases a consumer's on-demand, high-quality program choices at any particular time Mayer paragraph [0010] lines 1 – 3. Therefore, it would have been obvious to combine Mcternan with Mayer to obtain the limitation above).

As to claim 2, Mcternan as modified teaches the client system of claim 1 wherein the mass storage device comprises a redundant array of independent disks (Mcternan teaches the usage of persistent and transient memory.

Persistent memory can easily be read to be a hard drive and a RAID configuration is a well-known and documented setup for hard drives. RAID configurations are typically used for improved reliability and performance and as such would be obvious to one of ordinary skill in the art to use them for mass storage for increased performance at the time of invention.

Applying a known technique (RAID configurations) to a known device (hard drives) ready for improvement to yield predictable results (increased reliability and performance) is reasonable basis for determining obviousness under the *KSR International Co. v. Teleflex Inc.* decision).

As to claim 3, Mcternan as modified teaches the client system of claim 1 but does not teach wherein the mass storage device comprises a network storage solution. However, in an analogous art, Mayer teaches the usages of a network storage solution in paragraph [0048] lines 1 – 4 FIG. 6 shows an arrangement in which multiple end-users are well connected to the local library, which houses at least media server and edge cache. The local library mentioned is a network storage because when implemented segment A of programs are cached in it instead of the users personal computer.

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to use the teachings of claim 1 as taught by Mcternan as modified with Mayer's network storage solution. The motivation would have been so that the end-users may share the A segments, and not require individual caches within their personal PCs paragraph [0048] lines 15 – 17 Mayer.

As to claim 5, McTernan as modified teaches the client system of claim 1 but does not teach wherein the bandwidth measurement device and the download manager comprise a single process. However Mayer teaches in paragraph [0049] lines 14 – 17 when preparing to download segment A of programs, a determination can be made of the expected available bandwidth the program P may be split with the ratio is selected that best compensates for these conditions. Both Mayer and the applicant take the step to determine the bandwidth of the connection between the source and the destination. The idea of the two elements encompassing a single process is taught in that only when preparing to download is the determination of bandwidth made, hence they are steps of the same process.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to use the teachings of McTernan as modified with Mayer's combination of the two processes. The motivation would have been that the combination is obvious to try. Given that the download manager main purpose lies in its partial download, and the fact that the bandwidth measurement is what allows the download manager to functions as specified it would be obvious to try to combine the two into the same process.

As to claim 6, McTernan as modified teaches the client system of claim 1 wherein the download manager comprises a thread process. (Making a program a thread process is a well-known and thoroughly documented idea. Threaded processes have the advantage that they can perform several tasks concurrently

without the extra overhead needed to create a new process. Since making a program into a threaded process would tend to make it faster to execute it would be obvious to one of ordinary skill in the art at the time of invention to improve the download manager by making it a threaded process.

Applying the known technique (threaded process) to a known device (programs) ready for improvement to yield predictable results (increased execution speed) is reasonable basis for determining obviousness under the *KSR International Co. v. Teleflex Inc.* decision)

As to claim 7, Mcternan as modified teaches the client system of claim 1 wherein the download manager comprises one of the group consisting of an ActiveX control and a JAVA applet (In paragraph [0070] lines 1 – 7 Mcternan discloses the components that make up the Media Player, including the download manager, and then states that in alternative embodiments, these components are standalone software or hardware components accessed by executing applications, such as the Media Player. Given that the download manager is simply a standalone software program it is simply a design choice to implement it as an ActiveX control or JAVA applet)

As to claim 8, Mcternan as modified teaches the client system of claim 1 wherein the presentation manager comprises a threaded process. (Making a program a thread process is a well-known and thoroughly documented idea. Threaded processes have the advantage that they can perform several tasks

concurrently without the extra overhead needed to create a new process. Since making a program into a threaded process would tend to make it faster to execute it would be obvious to one of ordinary skill in the art at the time of invention to improve the presentation manager by making it a threaded process.

Applying the known technique (threaded process) to a known device (programs) ready for improvement to yield predictable results (increased execution speed) is reasonable basis for determining obviousness under the *KSR International Co. v. Teleflex Inc.* decision)

15. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mcternan and Mayer, and further in view of the Dictionary of Computer Science, Engineering, and Technology by Phillip A. Laplante (hereinafter "dictionary").

As to claim 4, Mcternan as modified teaches the client system of claim 1 but does not teach wherein the bandwidth measurement device comprises a timer. The dictionary defines bandwidth performance analysis as 'bandwidth represents the maximum rate at which a given device can perform.' Rate is a function of time and thus inherently the measurement of bandwidth would need a timer of sorts.

Given that Mcternan as modified proposes determining bandwidth it would be reasonable to say that a timer would be used during this determination. As such it would be obvious to one of ordinary skill in the art, at the time of invention, to use a timer to measure bandwidth.

16. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over McTernan and Mayer, and further in view of U.S. Pub. No. 2004/0078825 A1 Murphy (hereinafter "Murphy").

As to claim 9, McTernan as modified teaches the client system of claim 1 but does not teach wherein the presentation manager comprises a Windows Media Player application. However, in an analogous art, Murphy teaches this. In paragraph [0030] lines 17 through 18 Murphy discloses streaming files are playable by a Windows Media Player, offered by Microsoft Corp.

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to employ Murphy's use of Windows Media Player as its playing application in McTernan's (as modified) pre-loading client system. The motivation to combine the two ideas would have been to allow McTernan as modified's invention to work with a well-known and supported media playing application thus allowing it to apply to a larger base of users.

17. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayer and further in view of McTernan.

As to claim 13, Mayer teaches the method of claim 10 but does not teach wherein step (a) comprises retrieving from a multicast network a content file.

(McTernan teaches in paragraph [0042] lines 1 – 4 that in preferred embodiments,

the client device works in a highly autonomous manner, thereby allowing the server to use multicast techniques to distribute data to many clients simultaneously. The two references are analogous art because they are from the same field of distributing media over a network.

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to use Mcternan's usage of a multicast network with Mayer's pre-loading content. The motivation to combine is explained in Mcternan paragraph [0031] lines 9 – 11 'The transmission method that best facilitates broadcasting to many recipients simultaneously is multicasting.' Given this it would have been obvious to combine Mayer and Mcternan to obtain the invention as specified in claim 13)

As to claim 15, Mayer teaches the method of claim 10 but does not teach wherein step (f) comprises retrieving, in response to step (e), the remainder of the content file from a multicast network. (Mcternan teaches in paragraph [0042] lines 1 – 4 'In preferred embodiments, the client device works in a highly autonomous manner, thereby allowing the server to use multicast techniques to distribute data to many clients simultaneously.' The two references are analogous art because they are from the same field of distributing media over a network.

Therefore, at the time of invention, it would have been obvious to a person of ordinary skill in the art to use Mcternan's usage of a multicast network with Mayer's pre-loading content. The motivation to combine is explained in Mcternan paragraph [0031] lines 9 – 11 'The transmission method that best

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facilitates broadcasting to many recipients simultaneously is multicasting.' Given this it would have been obvious to combine Mayer and McTernan to obtain the invention as specified in claim 15)

Conclusion

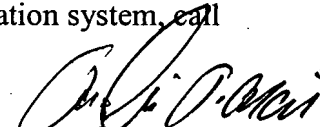
Prior art(s) made of record but not relied upon:

U.S. Pub. No. 2003/0037331 A1 to Lee 'System and Method for Highly Scalable Video on Demand'

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S. Mai whose telephone number is 571-270-5001. The examiner can normally be reached on Monday through Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on 571-272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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TAGHI ARANI
PRIMARY EXAMINER
8/30/07

Claim Tree

